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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/649,097	08/28/2000	Hisashi Ishikura	Q60517	7802

7590

06/10/2003

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EXAMINER

NGUYEN, NAM V

ART UNIT	PAPER NUMBER
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2635

DATE MAILED: 06/10/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/649,097

Applicant(s)

ISHIKURA ET AL.

Examiner

Nam V Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,8-14 and 17-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,8-14 and 17-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This communication is in response to applicant's response to amendment A which is filed August 02, 2003.

An amendment to the claims 1-8, 10 and 15-16 have been entered and made of record in the application of Ishikura et al. for a "vehicle key system" filed August 28, 2000.

Claims 6-7 and 15-16 are cancelled.

Claims 1-5, 8-14 and 17-19 are pending.

Response to Arguments

In view of applicant's amendment to amend the claim 3, therefore, examiner has withdrawn the rejection under 35 U.S.C §112, second paragraph.

Applicant's amendment and arguments with respect to claims 1-19, filed April 2, 2003 have been fully considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flick (US# 6,140,939) and in view of Scott et al. (US# 6,484,260).

Referring to claim 1, Flick discloses a vehicle key system for verifying identity of fingerprint information about a user's fingerprint and for controlling pieces of equipment in a vehicle according to a verification result (column 2 lines 16 to 21; see Figure 3), said system comprising:

A transmitter (50) including a fingerprint information (i.e. biometric characteristic) capturing means (59) for capturing fingerprint information from a user's fingerprint (column 2 lines 42 to 48; column 5 lines 5 to 13), and a transmitting (57) means for transmitting only the fingerprint information (fingerprint characteristic) captured by said fingerprint information capturing means (59), only a system-specific identifier previously stored in said identifier storage means, or both the fingerprint information and the system-specific identifier (column 8 line 26 to column 9 line 3; see Figure 5); and

A receiver (13) disposed in the vehicle (10) (i.e. vehicle remote start controller), including a receiving means (13) for receiving the fingerprint information transmitted from said transmitting means of said transmitter (50) (column 8 line 26 to column 9 line 3; see Figure 5),

a verification means (82) for verifying the received fingerprint information against a list of pieces of previously stored fingerprint information (column 8 line 19 to column 9 line 3; see Figure 5), and

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a control means (86) for controlling said pieces of equipment (30-37 and 41-46 see Figure 1) in the vehicle according to verification results from said verification means (column 9 lines 9 to 19).

However, Flick did not explicitly disclose that a transmitter including an identifier storage means for storing an identifier specific to said transmitter. Flick discloses that the transmitter transmits a uniquely coded transponder to the vehicle security systems to operate vehicle control system in prior art (column 1 lines 46 to 55; column 2 lines 3 to 13).

In the same field of endeavor of remote control identification system, Scott et al. disclose that a transmitter (6) (i.e. personal identification device) including an identifier storage means (20) (i.e. memory) for storing an identifier (i.e. an ID code) specific to said transmitter (6) (column 5 lines 16 to 26; column 6 lines 54 to 61; see Figures 1-2 and 8) in order to associate an ID code with the remote controlled device when verifying for permission to configure the automotive remote key entry system.

One of ordinary skilled in the art recognizes the need to have a transmitter including an identifier store in a memory of Scott et al. with the biometric characteristic of Flick because Flick suggests it is desired to provide additional biometric characteristic sensor to read and learn a fingerprint would prevent thief of valuables from a vehicle (column 1 line 65 to column 2 lines 14) and ^{scott} Bonder et al. teach that a transmitter including an identifier storage means for storing an identifier specific to said transmitter in order to verify that the ID code of the transmitter matches the stored ID code of the device. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to have a transmitter including an identifier store in a memory of Scott et al. with the biometric characteristic of Flick with the motivation for

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doing so would have been to increase the security of the portable remote control identification vehicle system.

Referring to claim 2, Flick in view of Scott et al. disclose a vehicle key system according to claim 1, Flick discloses wherein

said verification means (82) comprising feature verification means for verifying the features extracted from the fingerprint information (59) received from said transmitter (50) against features on an authorized user stored by said receiver (column 8 lines 55 to 66; see Figure 5), and

Comprehensively determining means for determining whether or not a user manipulating said transmitter is an authorized user and whether or not the manipulation is directed toward the vehicle corresponding to said transmitter (column 8 line 66 to column 9 line 8; column 9 lines 20 to 35);

Scott et al. disclose an identifier verification means (208) for verifying the specific identifier (i.e. an ID code) received from said transmitter (6) and the specific identifier (ID code) stored by said receiver (30) (column 12 lines 30 to 59; see Figure 8).

Referring to claim 3, Flick in view of Scott et al. disclose a vehicle key system according to claim 1, Flick discloses wherein said control means comprising engine control means (86) (i.e. vehicle remote start controller) for controlling an engine according to the verification result from said receiver (85) (column 8 lines 55 to 66; see Figure 5), door control means (11) for controlling a lock of doors according to the verification results from said receiver (see Figure 4) (column 8

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lines 26 to 45), and a trunk control means (25) for controlling a lock of a trunk according to the verification result of the receiver (see Figure 3) (column 4 lines 53 to 60; column 8 lines 1 to 18).

Claims 4-5, 8-14 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flick (US# 6,140,939) and in view of Scott et al. (US# 6,484,260) as applied to claim 1, and further view of Hsu et al. (US# 6,100,811).

Referring to claim 4, Flick in view of Scott et al. disclose a vehicle key system according to claim 1, Flick discloses wherein said receiver further comprising:

A first operation means (52a-52d) (i.e. input selection switches) for selecting only armed or disarmed modes to a manipulation performed by a user (column 5 lines 5 to 39; see Figure 2),

A first verification data-selection state storage means (i.e. memory in CPU) for storing the verification data-selection state (i.e. input interface of switches) indicating a selection state of the verification data whose value is set by said first operation means (52a-52d) and a selection state of the verification data received by said transmitter (50) (i.e. remote transmitter) (column 4 lines 47 to 52; column 5 lines 14 to 55), and

A display means (58) for displaying which information to be verified is selected from the fingerprint information or the identifier selected (column 5 line 63 to column 6 line 2).

However, Flick in view of Scott et al. did not explicitly disclose that selecting only the fingerprint information, only the identifier or the both of them according to a manipulation performed by a user.

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In the same field of endeavor of remote control vehicle system, Hsu et al. disclose that selecting only the fingerprint information, only the identifier or the both of them according to a manipulation performed by a user (column 2 lines 25 to 47; column 7 lines 27 to 48; see Figure 7) in order to control the operational modes of the remote control system.

At the time the invention, it would have been obvious to a person of ordinary skill in the art to recognize the need for changing the selecting modes of the fingerprint information, only the identifier or combination of both in the switching the controller between armed or disarmed modes of operation of Flick in view of Scott et al. because selecting the modes of the fingerprint information result would improve the reliable and convenient operation of the transmitter that has been shown to be desirable in the vehicle security system of Flick in view of Scott et al.

Referring to claim 5, Flick in view of Scott et al. and further view of Hsu et al. disclose a vehicle key system according to claim 4, Flick discloses wherein said transmitter (10) further comprising:

A second operation means (20-29) for selecting operational function according to a manipulation performed by a user (column 4 lines 31 to 60; see Figure 1), and

A second verification data-selection state storage means (14) for storing the verification data-selection state indicating a selection state of the verification data (49) whose value is set by said first operation means (52a-52d) and a selection state of the verification data received by said transmitter (50) (column 4 lines 61 to column 5 lines 42; see Figures 1-2).

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Referring to claim 8, Flick in view of Scott et al. and further view of Hsu et al. disclose a vehicle key system according to claim 4, Flick discloses wherein an operation unit (30) intended for operating a piece of equipment disposed in said vehicle also serves as said first operation means (30-37 and 41 to 46) (column 5 lines 14 to 32; see Figure 1).

Referring to claim 9, Flick in view of Scott et al. and further view of Hsu et al. disclose a vehicle key system according to claim 8, Flick discloses wherein said equipment (21) (i.e. the sensors of the vehicle) is a navigation device (i.e. movement of the vehicle) (column 1 lines 19 to 30).

Referring to claim 10, Flick in view of Scott et al. and further view of Hsu et al. disclose a vehicle key system according to claim 4, Flick discloses wherein a pedal (20) disposed in said vehicle also serves as said first operation means (column 4 lines 53 to 60; see Figure 1).

Referring to claims 11-14 and 17-19, Flick in view of Scott et al. and further view of Hsu et al. disclose a vehicle key system according to claims 2-5 and 8-10, Hsu et al. discloses wherein if said verification means (30) (i.e. matching device and check ID) previously stores no fingerprint information (i.e. guest mode), when the received information includes the system-specification identifier (i.e. a secret combination), said verification means performs only the verification of the received identifier against a previously stored identifier (column 2 lines 34 to 47; column 3 lines 28 to 37; column 7 lines 27 to 48; see Figure 7).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lambropoulos (US# 5,442,341) discloses a remote control security system.

Narisada et al. (US# 5,896,094) disclose a keyless entry system.

Pu et al. (US# 6,373,967) disclose a biometric combination lock.

Ho (US# 6,021,212) discloses an electronic key device using a fingerprint to initiate a computer.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nam V Nguyen whose telephone number is 703-305-3867. The examiner can normally be reached on Mon-Fri, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 703-305-4704. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Nam Nguyen
June 5, 2003



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